

Remarks:

Reconsideration of the application, as amended herein, is respectfully requested.

Claims 1 - 18 and 20 - 22 are presently pending in the application. Applicant appreciatively acknowledges the courtesy shown by Examiner Culler to Applicant's representative in the Telephonic Examiner's Interview of November 4, 2008. In accordance with the comments made during that Interview, and in an effort to forward prosecution, Applicant has amended claims 1, 7 and 14 of the present application. Claim 19 was previously canceled.

In item 2 of the above-identified Office Action, claims 1 - 2, 5, 7 - 8, 10 - 18 and 20 - 22 were rejected under 35 U.S.C. § 103(a) as allegedly being obvious over U. S. Patent No. 6,058,844 to Niemiec ("**NIEMIEC**") in view of U. S. Patent No. 4,508,033 to Fischer ("**FISCHER**"), U. S. Patent No. 3,238,869 to West et al ("**WEST**") and U. S. Patent No. 3,875,682 to Justus et al ("**JUSTUS**"). In item 3 of the Office Action, claims 3 - 4 were rejected under 35 U.S.C. § 103(a) as allegedly being obvious over **NIEMIEC** in view of **FISCHER**, **WEST** and **JUSTUS**, and further in view of U. S. Patent No. 6,550,390 to Frankenberger ("**FRANKENBERGER**"). In item 4 of the Office Action, claims 6 and 9 were rejected under 35 U.S.C. § 103(a)

as allegedly being obvious over **NIEMIEC** in view of **FISCHER**, **WEST** and **JUSTUS**, and further in view of U. S. Patent No. 5,913,471 to Makosch et al ("MAKOSCH").

Applicant respectfully traverses the above rejections, as applied to the amended claims.

During the Examiner's Interview, the Examiner's particular objection to the use in the claim of a particular number (i.e., 50 N/m) to describe the "considerably lower"-tensile stress downstream of the dryer was discussed. To address the concerns raised by Examiner Culler, Applicant has amended claim 1 of the instant application to recite, among other limitations:

at least one press cylinder for printing a paper web conveyed at a first tensile stress;

. . .;

a pull roll disposed downstream of said dryer **for** conveying the paper web along said path under a second tensile stress, **said second tensile stress being equal to or less than 10% of said first tensile stress**;
[emphasis added by Applicant]

Applicant's independent claim 7 has been similarly amended. Similarly, Applicant has amended independent claim 14 to recite, among other limitations:

conveying the paper web along a drying path under a second tensile stress of the paper web equal to or less than 10% of the first tensile stress;

The amendments to Applicant's claims are supported by the specification of the instant application, for example, on page 20 of the instant application, lines 1 - 8, which state:

Given appropriately selected rotational speed relationships, **the tensile stress along the drying path 7 can be lower than the tensile stress upstream of the printing unit 5 (in a printing path).** In particular, the tensile stress along the drying path 7 can be considerably lower than a conventional tensile stress in a printing path, for example **in the region of about 10%.** [emphasis added by Applicant]

See also, for example, page 21 of the instant application, lines 9 - 17, (" . . . for example in the range **of about 10% or less**") and page 24 of the instant application, lines 22 - 24 ("As compared with conventional **500 N/m tensile stress**, the value can be reduced, for example, **to about 50 N/m or even less**").

As such, each of Applicant's claims requires, among other limitations, that the **tensile stress of the paper web downstream of the dryer be equal to or less than 10% of the tensile stress of the paper web upstream of the printing unit (i.e., the "press cylinder")**. Applicant's specification teaches the criticality of Applicant's particularly claimed reduction in tensile stress along the dryer path in reducing

fluting during printing. See, for example, page 6 of the instant application, lines 16 – 26, which state:

The invention is distinguished by the addition of an apparatus disposed downstream of the press cylinder and upstream of the dryer for separating the web from the press cylinder, and an apparatus for driving the first pull roll, **which drives the first pull roll at a rotational speed that is reduced as compared with the rotational speed of the press cylinder.**

The solution according to the invention has the advantage that the production of fluting waves is prevented or at least minimized. [emphasis added by Applicant]

See also, for example, page 8 of the instant application, lines 12 – 25, which state:

According to the invention, the rotational speed of the first pull roll is reduced as compared with the rotational speed of the press cylinder. **The tensile stress prevailing in the region or in the section of the dryer can consequently advantageously be kept low, for example less than about 50 N/m, in such a way that the curves of a meander-like web path which are formed can have a large curvature or a small radius of curvature, for example less than about 200 mm.**

It has **surprisingly** been found that fluting can advantageously be prevented or at least considerably reduced or minimized by the web being guided under a **low web tension** and along a meander-like web path with a small radii of curvature, **in particular along a drying path.** [emphasis added by Applicant]

As such, the specification of the instant application describes the **surprising** results found by Applicant, wherein the fluting can advantageously be prevented or considerably reduced **by guiding the paper web at a low web tension through**

the drying path. The specification of the instant application also clearly states that, by conveying the web through the dryer path at a tension of about 10% of the tension upstream of the printing roller, the web is able to form an optimal meander-like web path, thus reducing or eliminating undesirable fluting of the web. See, for example, page 24 of the instant application, lines 22 - 26, which state:

As compared with conventional **500 N/m tensile stress**, the value **can be reduced, for example, to about 50 N/m or even less. Given such low tensile stresses, the web 4 can form a meander-like web path 36 whose radii of curvature are small**, preferably can be less than about 200 mm.

The prior art cited in the Office Action does not teach or suggest, among other limitations of Applicant's claims, conveying a paper web through a drying path under a tensile stress of 10% or less of the tensile stress upstream of the printing cylinder. More particularly, the above limitations of Applicant's claims, among others, are not rendered obvious by the combination of **NIEMIEC** in view of **FISCHER, WEST** and **JUSTUS**, as alleged in the Office Action.

Rather, the combination of **NIEMIEC** and **FISCHER** (as well as, in combination with **WEST** and **JUSTUS**) do not teach or suggest, among other limitations, Applicant's particularly claimed reduction in tensile stress of the paper web through the dryer path, relative to the tensile stress upstream of the printing

cylinder. None of the cited references provide any recognition that fluting can be reduced by conveying the paper web through the drying path at a tensile stress of 10% or less of that upstream of the drying path. M.P.E.P. § 2144.05 (II) (B) states, in part:

A particular parameter must **first be recognized as a result-effective variable**, i.e., a variable which achieves a recognized result, **before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation.**

[emphasis added by Applicant]

There is no recognition in the cited prior art references that a reduction of the tensile stress of the paper web downstream of the dryer to 10% or less of the tensile stress upstream of the printing cylinder would create an optimal meander-like path and, thus, reduce fluting, as discovered by Applicant. As a result of this failure of the prior art to recognize the surprising results linked to the "result-effective variable" discovered by Applicant, Applicant's particularly claimed value of 10% or less **cannot** be characterized as obvious, (i.e., under "routine experimentation" or otherwise).

For the foregoing reasons, among others, Applicant's claims are believed to be patentable over the **NIEMIEC, FISCHER, WEST, JUSTUS, MAKOSCH** and **FRANKENBERGER** references, whether taken alone, or in combination.

It is accordingly believed that none of the references, whether taken alone or in any combination, teach or suggest the features of claims 1, 7 and 14. Claims 1, 7 and 14 are, therefore, believed to be patentable over the art. The dependent claims are believed to be patentable as well because they all are ultimately dependent on claims 1, 7 or 14.

In view of the foregoing, reconsideration and allowance of claims 1 - 18 and 20 - 22 are solicited.

In the event the Examiner should still find any of the claims to be unpatentable, counsel would appreciate receiving a telephone call so that, if possible, patentable language can be worked out.

The instant Amendment is being filed simultaneously with a Request for Continued Examination and its associated fee. Please also consider the present as a petition for a one (1) month extension of time, and please provide a one (1) month extension of time, to and including, November 25, 2008, to respond to the present Office Action.

The extension fee for response within a period of one (1) month pursuant to Section 1.136(a) in the amount of \$130.00 in accordance with Section 1.17 is enclosed herewith.

Please provide any additional extensions of time that may be necessary and charge any other fees that might be due with respect to Sections 1.16 and 1.17 to the Deposit Account of Lerner Greenberg Stemer LLP, No. 12-1099.

Respectfully submitted,

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For Applicant

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